

ASP.NET: Using VisualBasic.NET, ADO.NET, and XML

Duration: 5 Days

Course Overview:

You already know how to write simple, static Web pages using HTML and perhaps Cascading Style Sheets and client-side JavaScript code. Now you are ready to create dynamic Web pages using the latest Microsoft server-side technology: ASP.NET. You will create ASP.NET Web pages that dynamically display content, display, manipulate, and modify data in a relational database, and display, manipulate, and modify XML data.

Students Learn How To:

- Write ASP.NET Web pages using the basic features of the page class
- Increase the separation of code from content and the modularity of your code
- Create web forms using web controls
- Display and modify data from a database by using ADO.NET with ASP.NET Web controls
- Manipulate and update data using ADO.NET datasets
- Read, write, edit, and validate XML documents
- Convert and transform XML data
- Design and configure numerous aspects of an ASP.NET application

Who Should Attend: Programmers at any skill level interested in writing ASP.NET applications.

Prerequisites: Knowledge of VisualBasic.NET or prior experience with VB6 or VBScript is required. If you will be using VisualStudio.NET in the course, then we recommend Visual Studio.NET Introduction, or prior experience with Visual Basic, Visual C++, or Visual InterDev. Prior experience with ASP Classic (2.0 or 3.0), XML basics, and SQL is helpful, though not required.

Course Outline:

Writing Basic ASP.NET Pages

Write a Simple ASP.NET Web Page
Output Content and Redirect to a Different Page
Pass User Information between Pages
Store and Retrieve Data Using a Cookie
Perform Browser Detection
Transfer Processing

Increasing Code Separation and Modularity

Separate Code from Content with HTML Controls
Implement a Postback Form
Increase Code Separation with a Code-behind File
Increase Modularity with a User Control

Creating Web Forms with Web Controls

Create a Web Form Using ASP.NET Web Controls
Create Grouped Elements with List Controls
Display Data with a Repeater Control
Display Data with DataList and DataGrid Controls
Verify User Input with Validation Controls
Rotate Banner Ads with the Ad Rotator Control
Create a Calendar Using a Calendar Control

Accessing Databases with ADO.NET

Display Data from a Database
Display Data from a Database Using Web Controls
Customize Databound Results Using Style Sections
Customize Databound Results Using Templates
Modify Data with SQL Commands

Manipulating Data with ADO.NET DataSets

Create a DataSet with Multiple Tables
Display Data from Related Tables
Manipulate Data in a DataGrid Control
Modify DataSet Records and Merge

Programming XML Documents with ASP.NET

Access and Display an XML Document
Validate an XML Document Using a Schema
Search an XML Document for Specific Information
Edit an XML Document
Write XML Documents to Disk

Converting and Transforming XML Data with ASP.NET

Write Data from a DataSet to an XML Document
Create Nested XML from a DataSet Object
Read Data into a DataSet from an XML Document
Transform an XML Document
Output XSLT Results Using the XML Control

Architecting and Configuring an ASP.NET Application

Configure an ASP.NET Application
Configure ASP.NET Error Tracing
Manage Application State
Preserve Session State
Cache Page Output and a User Control

Appendix A: Page Object Members

Appendix B: Regular Expression Syntax Summary

Appendix C: XPath Expression Syntax and Examples

Appendix D: Critical ASP.NET Resources